

REMARKS

The Office Action mailed on September 20, 2005 has been given careful consideration by applicant. Reconsideration of the application is respectfully requested in view of the amendments and comments herein.

The Office Action

Claim 7 is objected to for minor informalities.

Claims 1-16 and 21-24 are rejected under 35 U.S.C. §102(e) as being anticipated by Eckel, et al., (US 6,388,399).

Claims 1-2, 4-5, 9, 16, and 21-24 are rejected under 35 U.S.C. §102(e) as being anticipated by Lys, et al., (US Pub No. 2004/0212321).

Claims 1, 16, and 21 are rejected under 35 U.S.C. §102(b) as being anticipated by Hochstein, et al., (US 5,661,645).

Acknowledges

The examiner has requested an acknowledgement of the duty to disclose pursuant to 37 C.F.R. §1.56. Applicant refers the examiner to the Declaration concurrently filed with the subject application in which the inventor acknowledged the duty to disclose.

Objection to Claim(s)

Claim 7 is objected to for minor informalities. This objection should be withdrawn for at least the following reason. Claim 7 has been amended herein to cure the informality.

The First Anticipation Rejection

The Examiner has rejected claims 1-16 and 21-24 under 35 U.S.C. §102(e) as being anticipated by Eckel et al., (US 6,388,399). However, Eckel, et al. does not teach or suggest each and every element as recited in claims 1-16 and 21-24 and, therefore, does not anticipate the subject claims.

Eckel, et al. teaches a network based control system. (See col. 8, ll. 20-22). This system includes various components that work together with devices that communicate using the same standard communication protocol to form a local

operating network. (See col. 8, ll. 20-22). The network based control system includes a control unit 60 for controlling various external loads such as a fluorescent ballasts 82, a relay load(s) 84, a dimming load(s) 86, and motor loads. (See col. 9, ll. 59-60, col. 10, ll. 1-3, and col. 11, ll. 12-13). The control unit 60 includes a controller 90 that generates control signals that are conveyed to various circuits, which in turn control these external loads as well as other external devices. (See column 11, lines 13-28). Hence, Eckel, et al. teaches a control network with a control unit/controller that controls various external loads.

In contrast, independent claim 1 (and similarly independent claims 16 and 21) recites an intelligent LED module having at least one LED. The intelligent LED module receives command signals from an associated controller. The command signals control the at least one LED and include an on or off command, a dimming command, a flashing command, and/or an emergency disconnect command. The command signals are generated in response to at least one status signal of the LED. The intelligent LED module generates the at least one status signal, which is indicative of at least one or more of the following: a current traveling through the at least one LED, a voltage applied across the at least one LED, and a light energy emitted from the at least one LED. The intelligent LED module conveys the at least one status signal to the associated controller. The associated controller uses this information to generate the command signals (on or off, dimming, flashing, and/or emergency disconnect) that control the at least one LED residing within the intelligent LED module.

The examiner asserts that Eckel, et al. teaches an intelligent LED module having at least one LED, wherein the intelligent LED module generates at least one status signal indicative of one or more of a current traveling through the at least one LED, a voltage applied across the at least one LED and a light energy emitted from the at least one LED. The examiner references Figures 14 and 18 of Eckel, et al. to teach such aspects. However, neither figure teaches or suggests the subject claims. With respect to Figure 14, Eckel, et al. discloses a dimmer switch unit 320 that includes a LED display circuit 344 that functions to provide a user with a visual indication of a state or a next state of an external light source. For example, the circuitry 344 can be used to display a dimming level for the next time the external light source is turned on. (See col. 24, l. 11 – col. 28, l. 9). In Figure 18, Eckel, et al. discloses a light sensor unit 410. The light sensor unit 410 includes an ambient light sensing portion that senses light. This

portion of the light sensor 410 includes ambient light sensor circuitry 450 that senses ambient light and generates an analog signal representing the level of light sensed by the sensor 450. A digitized ambient light level is processed and transmitted as a network variable to all devices, over the network, that are bound to the device. (See col. 28, l. 64 – col. 31, l. 60). Hence, Eckel, et al. teaches a light sensor that senses ambient light (not light emitted from at least one LED residing within an intelligent LED module) and circuitry that provides a lighted representation of a state of an external light source. However, Eckel, et al. does not contemplate an intelligent module that generates a status signal indicative of a current traveling through, a voltage applied across and/or a light energy emitted from at least one LED residing within the intelligent module as recited in the subject claims.

Claim 1 further recites that the status signal generated by intelligent LED module, based on the signal indicative of a current traveling through, a voltage applied across and/or a light energy emitted from the at least one LED residing within the intelligent module, is used to generate a command signal that controls the intelligent module LED(s). The command signal includes one or more of an on or off command, a dimming command, a flashing command, and an emergency disconnection command, and controls the at least one LED residing within the LED module. Eckel, et al. is silent regarding generating a command signal based on such status signal. In addition, since Eckel, et al. does not teach or suggest an intelligent module with an LED(s) that generates such status signal (as described in the preceding paragraph), Eckel, et al. cannot teach that this status signal is used to generate an on or off command, a dimming command, a flashing command, and/or an emergency disconnection command signal for the at least one LED residing within the LED module.

In view of the above, it is readily apparent that Eckel, et al. does not teach or suggest each and every element as recited in the subject claims. Accordingly, the rejection of independent claims 1, 16, and 21 (and claims 2-16 and 22-24) should be withdrawn.

The Second Anticipation Rejection

The Examiner has rejected claims 1-2, 4-5, 9, 16, and 21-24 under 35 U.S.C. §102(e) as being anticipated by Lys, et al., (US Pub No. 2004/0212321). However, Lys, et al. does not teach or suggest each and every element as recited in the subject

claims. Instead, Lys, et al. teaches methods and apparatus for providing power to devices via an AC power source and for facilitating the use of LED-based light sources on AC power circuits that provide signals other than standard line voltages. (See Abstract).

The examiner asserts that Lys, et al. teaches an intelligent LED module with at least one LED in which the intelligent LED module generates at least one status signal indicative of one or more of a current traveling through the at least one LED, a voltage applied across the at least one LED and a light energy emitted from the at least one LED, wherein the status signal is used to generate a command signal, including, a dimming command, a flashing command, and an emergency disconnection command, and controls the at least one LED residing within the intelligent LED module, as recited in the subject claims. The examiner references paragraphs [0098], [0103], and [0107] as support for this assertion. However, these sections of Lys, et al. do not teach or suggest such aspects.

Rather, paragraph [0098] discloses a lighting unit 200B that drives light sources 104A, 104B, and 104C in order to generate various intensities of light from the light sources. Paragraph [0107] discloses that the lighting unit 200B can receive signals 122 from other signal sources 124 to control the light sources 104A, 104B and 104C. Paragraph [0103] discloses that the lighting unit 200B can also receive a user interface signal 118 associated with user-selectable settings or functions. Hence, none of these sections teach or suggest an intelligent LED module that generates a status signal indicative of various opto-electrical characteristics of an LED residing within the intelligent LED module, wherein the status signal is used to generate a command signal used to control the LED residing within the intelligent LED module.

From the foregoing, it is readily apparent that Lys, et al. does not anticipate, or teach or suggest each and every element as recited in the subject claims. Therefore, it is respectfully requested that this rejection be withdrawn.

The Third Anticipation Rejection

The Examiner has rejected claims 1, 16, and 21 under 35 U.S.C. §102(b) as being anticipated by Hochstein, et al., (US 5,661,645). However, Hochstein, et al. does not teach or suggest each and every element as recited in the subject claims. Hochstein, et al. teaches an apparatus (10) for supplying regulated voltage DC electrical

power to an LED array (12) to illuminate the LED array (12). Upon sensing a failure of the AC power, a battery backup system (62) controls a switch-over relay (82) to connect the battery backup system (62) to the rectifier (32) to provide DC power to the switchmode converter (38) to illuminate the LED array (12). (See Abstract).

The examiner references column 10, line 62 – column 11, line 5 to support his assertion. However, this section of Hochstein, et al. does not teach or suggest such aspects. Instead, this section teaches using certain switchmode, regulating power supplies to power LED signals from half wave rectified AC power supplies, wherein upon detecting a half wave signal, the switchmode power supply reduces its output voltage to the LED array. In contrast, the subject claims recite an intelligent LED module with at least one LED in which the intelligent LED module generates at least one status signal indicative of one or more of a current traveling through the at least one LED, a voltage applied across the at least one LED and a light energy emitted from the at least one LED, wherein the status signal is used to generate a command signal, including, a dimming command, a flashing command, and an emergency disconnection command, and controls the at least one LED residing within the intelligent LED module, as recited in the subject claims. Hochstein, et al. does not teach or suggest such aspects and, thus, this rejection should be withdrawn.

Newly Added Claim(s)

Claim 25 has been added to further emphasize various aspects already presented in pending claims. No new subject matter has been added. Entry of claim 25 is kindly requested.

CONCLUSION

For the reasons detailed above, it is respectfully submitted that all claims (1-16 and 21-25) remaining in the application are in condition for allowance.

Respectfully submitted,

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12/25/05
Date



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CERTIFICATE OF MAILING

Under 37 C.F.R. § 1.8, I certify that this Amendment is being

- ☒ deposited with the United States Postal Service as First Class mail, addressed to: MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.
- ☐ transmitted via facsimile in accordance with 37 C.F.R. § 1.8 on the date indicated below.
- ☐ deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated below and is addressed to: MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Express Mail Label No.:	Signature <i>Laurie A. Boylan</i>
Date December 20, 2005	Printed Name Laurie A. Boylan